

Catawba is an American *Vitis labruscana* type grape that was discovered by the Catawba River in North Carolina. The 180-day growing season in southern Missouri allows Catawba to ripen fully and avoid the high acid levels encountered in other eastern grape growing areas. The pinkish-blue berries are large and the clusters are medium in size. It has the characteristic "foxy" *labrusca* character. The vines are hardy and vigorous with susceptibility to several fungal diseases including black rot and downy mildew. Catawba ripens late, a couple of weeks after Concord. Catawba is a pinkish-blue grape that is processed as a white wine grape. It is not fermented on the skins so rice hulls are recommended for use in processing due to its "slip skin" characteristic. It makes a medium bodied, fruity, *labrusca* wine that is best made in a sweeter style. The wine is pink to orange in color.

Cayuga White is a hybrid wine grape released from the New York State Agricultural Experiment Station at Geneva in 1972. The clusters and berries are large and cluster thinning is recommended. The vines are vigorous and moderately winter hardy with susceptibility to several fungal diseases including black rot, downy mildew, and anthracnose. Cayuga White should be harvested at about 15 to 17 degrees Brix sugar level in Missouri for the best quality wine. It is usually picked about two weeks before Concord. It has nice, fruity (citrus) notes and could be described as "Germanic" (Riesling-like) in style. It is light bodied and light green in color.

Chambourcin is a French-American hybrid blue-black wine grape with beautiful large loose clusters of medium-sized berries. The vines must be cluster thinned. The vine is low to moderately vigorous and is not reliably hardy in northern Missouri. Chambourcin is susceptible to several fungal diseases including powdery mildew and, to a lesser extent, downy mildew. Chambourcin ripens about the same time as Concord. It is processed as a red wine grape and is fermented on the skins. Chambourcin makes a high quality, full-bodied, dry red wine that is moderately fruity, possibly with some subdued berry notes. The wine color is medium to dark red.

Chardonel is a high quality white hybrid wine grape released from the New York State Agricultural Experiment Station at Geneva, New York in 1996. It is a cross of Chardonnay by Seyval Blanc and is very similar in flavor to its Chardonnay parent. It is a moderately vigorous and moderately cold hardy vine that is highly productive and requires cluster thinning to prevent over cropping and to achieve maximum quality. It has moderate- to large-sized clusters of medium-sized berries and is somewhat more rot resistant than its Chardonnay parent is. It has been found to be somewhat susceptible to the root form of Phylloxera and may benefit from grafting to a pest resistant rootstock.

Concord grapes were selected from the wild in the 1840s in Concord, Massachusetts. This American *Vitis labruscana* has the characteristic foxiness associated with *labrusca* grapes. Concord has medium-sized clusters of large berries. Uneven ripening of the berries can be a problem in warm climates. The vines are very winter hardy and vigorous. They are susceptible to powdery mildew and black rot. Concord ripens in early September in south-central Missouri. Concord is fermented on the skins, as recommended for red wine grapes. Since it is fermented on the skins, it does not need rice hulls in processing even though it is a "slip skin" *labrusca* type. Concord is best made into a sweeter style wine that is fruity and candy-like. To achieve this style, after fermentation on the skins, it should then be processed as a white wine. Concord is medium in body and is deep blue-purple in color.

Norton/Cynthiana is an American grape, *Vitis aestivalis*, which was found in 1835 near Richmond Virginia. Sometimes called Virginia seedling, it is the premium red wine grape in Missouri. There is some controversy as to the name. Some call the grape Norton and others Cynthiana, but most consider both one and the same. The clusters are small- to medium-sized with small blue-black berries. Norton is very hardy and extremely vigorous and often must be trained to a divided canopy training system. It is one of the most disease resistant grape varieties, with some resistance even to black rot. Norton is the latest ripening grape in Missouri, about two to three weeks after Concord. Norton is processed as a red wine and is fermented on the skins. Norton makes a dry red wine that is medium in body with some fruity overtones. It is very dark in color.

St. Vincent supposedly came from Philip Wagner's Boordy Nursery in a shipment of vines to Lucian Dressel in Missouri. Lucian propagated it and sent it back to Wagner for further propagation and distribution. It is a red grape for wine with a large berry size and moderately sized, loose clusters. It has high vigor and moderate to high degree of winter hardiness. The fruit matures late season. It should be cluster thinned and yield is high. The vine trains well to a cordon system with spur training. A good spray program is needed to control diseases. Loose clusters make it less susceptible to bunch rot. Wine quality is good. It is typically made into a dry, red wine or used for blending.

Seyval Blanc is a French-American white hybrid grape with large greenish-yellow clusters and medium-sized berries. Cluster thinning is necessary to prevent over cropping. The vines are moderately vigorous and moderately hardy. It is susceptible to fungal diseases including powdery mildew and bunches are susceptible to rot. Seyval Blanc ripens about two weeks before Concord. It is processed as a white wine and is not fermented on the skins. Seyval Blanc makes a good all purpose neutral, crisp, white wine that is light to medium in body. It is light green to straw in color.

Traminette is a late mid-season, high-quality white wine grape released by the New York State Agricultural Experiment Station in Geneva, New York in 1996. It is a cross between Joannes Seyve 23.416 and Gewürztraminer and produces fruit and wine quality similar to its Gewürztraminer parent. Vines are vigorous, moderately cold hardy, and have a late bud burst, similar to that of Norton and Vignoles. It is moderately productive and does not require cluster thinning. It has a high percentage of *Vitis vinifera* in its background and grafting to pest-resistant rootstocks is recommended to overcome potential problems with the root form of Phylloxera. The wines have floral and fruity aromas with a fruity, somewhat spicy flavor and are currently growing in popularity in Missouri and the Midwest.

Vidal Blanc is a French-American hybrid grape. It has large clusters of medium to small size berries with small russet dots on them. Vines should be cluster thinned. The vines are moderately winter hardy and susceptible to several fungus diseases including powdery mildew and anthracnose. Vidal Blanc is harvested about a week or two after Concord. The clusters resist rot and can stay on the vine for a longer period of time compared to Seyval Blanc. Vidal Blanc is processed as a white wine grape and is not fermented on the skins. Vidal Blanc makes a very good white wine with fruity and floral notes. It can be described as "Germanic" in style and is light green to straw in color.

Vignoles is a white French-American hybrid wine grape cultivar that is widely grown in the East and Midwest. It produces a variety of high quality wine styles, including dry, off-dry, and sweet wines and is frequently used in white wine blends. Vignoles wines boast an aromatic, floral nose and excellent fruity flavors of stone fruit and citrus. It enjoys great popularity with Missouri's wine-buying public. The vines have good cold hardiness and a later bud opening period than most wine grape cultivars, thus making it less susceptible to late frost damage. The clusters are small and very tight and are highly susceptible to bunch rots. It is an earlier ripening cultivar and in Missouri is harvested in late August or early September.

Missouri Wine & Grape Board
Contact: Jim Anderson, Executive Director
1616 Missouri Boulevard
Jefferson City, MO 65109
(800) 392-9463
www.missouriwine.org
missouri.wine@mda.mo.gov

In cooperation with the
Missouri Agricultural Statistics Service
573-876-0950
nass-mo@nass.usda.gov

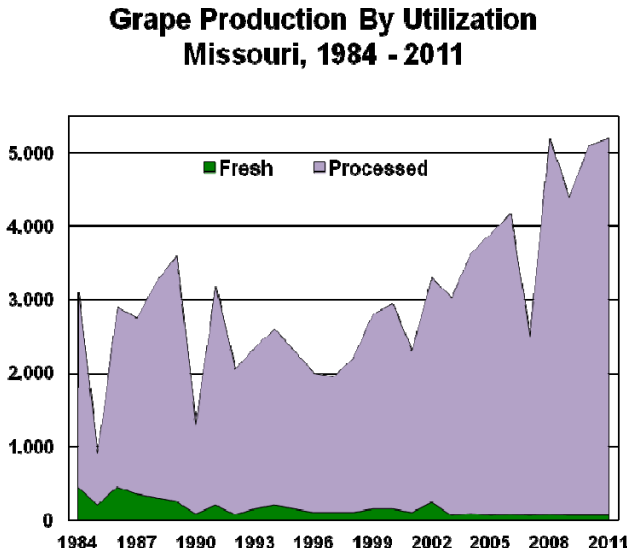
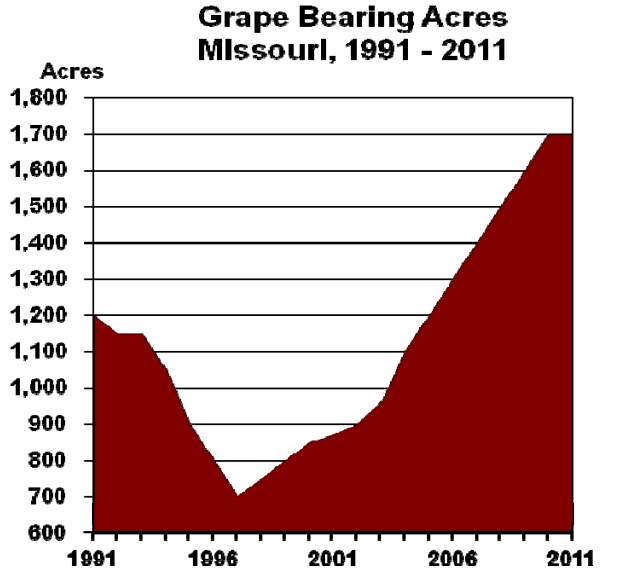
Institute for Continental Climate Viticulture
& Enology (ICCVE)
573-882-6656
www.iccve.missouri.edu/



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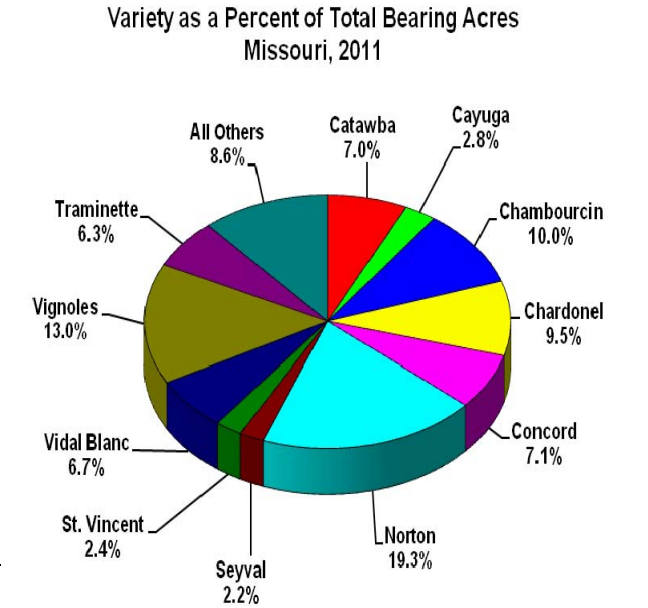
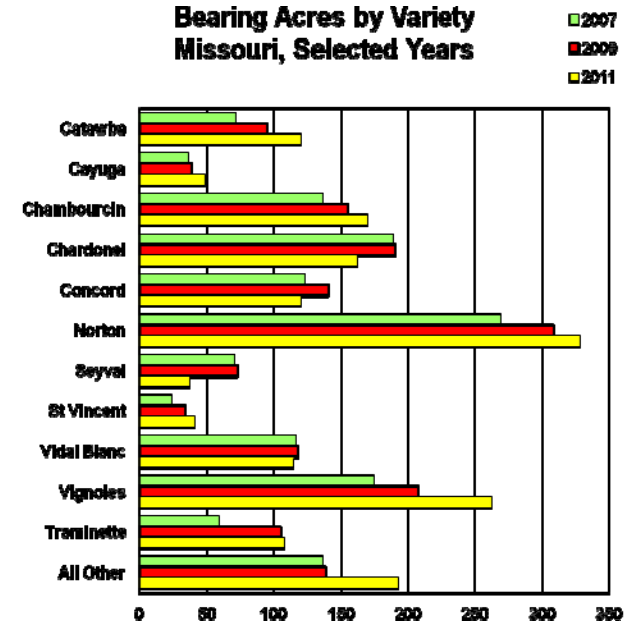
Bearing Acreage and Yield by State, 2009 – 2011						
State	Bearing Acreage			Yield per Acre		
	2009	2010	2011	2009	2010	2011
	<i>acres</i>			<i>tons</i>		
AR	600	600	600	3.17	3.50	2.00
CA	789,000	792,000	792,000	8.31	8.55	8.17
GA	1,300	1,300	1,500	3.15	3.54	2.33
MI	14,200	14,200	14,200	6.80	2.54	6.62
MO	1,600	1,700	1,700	2.75	3.00	3.06
NY	37,000	37,000	37,000	3.59	4.76	5.08
NC	1,800	1,800	1,800	2.67	2.89	2.89
OH	1,900	1,900	1,900	3.02	1.83	3.94
OR	15,600	16,900	18,400	2.58	1.85	1.88
PA	13,600	13,600	13,600	4.71	6.10	6.69
TX	3,300	3,000	4,400	1.88	2.97	1.21
VA	2,900	2,700	2,600	2.97	2.44	2.65
WA	62,000	65,000	67,000	6.15	5.17	4.72
US	944,800	951,700	956,700	7.73	7.85	7.56



Total Utilized Production By State, 2009 - 2011			
State	2009	2010	2011
	<i>tons</i>		
AR	1,790	1,990	1,100
CA	6,557,000	6,773,000	6,473,000
GA	4,100	4,300	3,300
MI	78,400	36,000	93,000
MO	4,400	5,100	5,200
NY	130,000	176,000	188,000
NC	4,800	4,950	4,980
OH	5,180	3,050	7,330
OR	40,200	31,200	34,500
PA	62,000	82,000	87,000
TX	3,050	8,500	4,610
VA	7,980	6,450	6,020
WA	381,000	336,000	316,000
US	7,279,900	7,468,540	7,224,040

Price and Value by State, 2009 - 2011						
State	Price			Value of Production		
	2009	2010	2011	2009	2010	2011
	<i>dollars per ton</i>			<i>thousand dollars</i>		
AR	753	811	982	1,347	1,613	1,080
CA ^{1/}	497	474	550	3,260	3,209	3,562
GA	1,480	1,270	1,280	6,055	5,440	4,230
MI	341	427	362	26,712	15,373	33,620
MO	902	885	831	3,968	4,513	4,323
NY	367	388	361	47,748	68,316	67,869
NC	818	918	1,030	3,927	4,545	5,105
OH	973	711	398	5,040	2,169	2,916
OR	1,910	2,030	2,060	76,782	63,336	71,070
PA	293	306	306	18,136	25,081	26,626
TX	1,170	1,250	1,520	3,554	10,657	6,987
VA	1,600	1,700	1,540	12,768	10,965	9,271
WA	548	637	599	208,959	214,096	189,396
US ^{1/}	505	487	552	3,675	3,635	3,985

1/California and US Value of Production shown in millions.



Bearing Acres by Variety Missouri, Selected Years						
Variety	2007		2009		2011	
	Bearing Acres	% of Total	Bearing Acres	% of Total	Bearing Acres	% of Total
	<i>acres</i>	<i>%</i>	<i>acres</i>	<i>%</i>	<i>acres</i>	<i>%</i>
Catawba	71.1	5.1	94.6	5.9	119.8	7.0
Cayuga	35.6	2.5	38.1	2.4	48.1	2.8
Chambourcin	135.6	9.7	154.2	9.6	169.1	10.0
Chardonel	188.9	13.5	190.4	11.9	161.3	9.5
Concord	123.2	8.8	139.9	8.7	120.5	7.1
Norton	268.2	19.1	307.9	19.3	327.8	19.3
Seyval	69.9	5.0	72.6	4.5	37.0	2.2
St Vincent	23.2	1.7	33.6	2.1	40.3	2.4
Vidal Blanc	116.3	8.3	117.9	7.4	114.7	6.7
Vignoles	173.7	12.4	207.6	13.0	261.5	15.4
Traminette	58.8	4.2	105.0	6.6	107.3	6.3
All Other	135.5	9.7	138.2	8.6	192.5	11.3
TOTAL	1,400	100.0	1,600	100.0	1,700	100.0